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THE AMERICAN PRACTITIONER.

MARCH, 1875.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ON THE PLACE OF ALCOHOL IN THERAPEUTICS.

BY LUNSFORD P. YANDELL, M. D.

The true place of alcohol among therapeutic agents is by no means a settled point in the minds of many practitioners. What in general is its *modus operandi*, what its effect upon the pulse and upon the temperature of the body in small and in large doses, and whether in any sense it can be considered a food, are questions which in the last few years have been discussed with great animation; and, as in regard to many other powerful remedies, the most contradictory views have been set forth respecting its action and its value. The great evils, physical and moral, that attend its abuse as a beverage have naturally excited prejudices against its use in disease, and there are those who would discard it altogether from medicine; while, on the other hand, a much larger number have undoubtedly employed it without discrimination, and to an extent not warranted either by experience or sound theory. By common consent in all past times it has been held to be the most reliable of all diffusible stimulants; but an eminent

English writer has lately asserted that it possesses no stimulant powers at all. The general opinion at this time in regard to its action on the animal system is that it retards tissue-change, and so supports the vital powers in wasting diseases; but only a few years ago a writer in the British Medical Journal advanced the opposite opinion, claiming that alcohol hastens the waste of the tissues, and that by such disintegration the body in sickness is supplied with food—in fact lives upon itself.

The thorough revision of this subject, brought about by the practice, which has been extensively pursued in late years, of giving alcoholic drinks in acute diseases, has put some of these questions to rest, and we are now in a position to form much more trustworthy opinions respecting the action of alcohol than was possible a few years ago. I propose in this paper briefly to inquire as to the points that seem to have been settled by recent experiments, and, in the light they have given us, what are the morbid conditions in which the use of alcohol is admissible or necessary.

The famous theory of Liebig, according to which alcohol is to be ranked with starch and fats among alimentary matters, as a supporter of combustion in the body by which animal heat is preserved, was for many years almost universally accepted by physiologists. Alcohol was regarded by all as a species of fuel-food, taking no part in nutrition, but capable in certain conditions of performing a most useful part in the animal economy. But in an elaborate memoir on the subject, by MM. Lallemand, Duroy, and Perrin, doubt at last was cast upon its correctness. These experimentalists claimed to have established the fact that alcohol undergoes no change in the animal body, but is expelled from it as swallowed, chiefly by the kidneys. Others, following up the investigation, professed to have recovered eighty per cent of the ingested alcohol; but in all these experiments enormous doses were given. Passing rapidly, as the fluid does, into the circulation, it was impossible

that all could be oxidized in a limited time, and some must be eliminated unchanged. When taken in moderate quantities there can be no doubt that it is wholly consumed in the system. This has been shown in such a multitude of experiments that the question must be considered settled. Even in poisonous doses not more than one fourth has been found retained in the bodies of rabbits after twenty-four hours. Dupré has proved by careful experiments on himself that the quantity exhaled by the breath and discharged with the urine is but a fraction of the amount imbibed. All up to a certain amount is burnt up in the round of the circulation. This amount, from a series of careful observations made by Dupré, Schulinus, and himself, Anstie places at one ounce and a half. So much is consumed in the system, and may be regarded as the limit of the proper dietetic amount. The quantity that escapes by the skin, bowels, or lungs, even when given in large doses, is admitted by all to be insignificant.

Alcohol then is to be looked upon as a form of food, ministering not to the growth of any tissue, but, like farinaceous substances, developing heat and energy in the system, and protecting the tissues against the wear and tear incident to the vital processes. It counteracts the disintegration of the blood-corpuscles as well as of the organized tissues, and thus supports the system in protracted cases of disease attended by loss of appetite and digestion.

It is now conceded by all physiologists that while Liebig's classification of food was substantially correct, his conception of the office of fats and starch — and of alcohol, which he placed by their side—was too narrow. Undoubtedly they develop heat in the process of oxidation which they undergo when heat is required, but in other circumstances, instead of heat, muscular or nervous force is demanded, and then heat assumes the shape of energy. We account in this way for the craving of fat food by laborers in southern latitudes, where certainly a calorifacient diet is not needed. And in states of

the system where wasting is going on from disease, and the supply is not kept up by the digestion of nutritive food, alcohol at once affords energy to the muscular and nervous systems, and protects the tissues against the disintegrating force of oxygen.

Alcohol has from its introduction as a medicine ranked among diffusible stimulants. It is esteemed the most powerful and the most reliable of its class. Dr. Stillé* says, "Larger but still not excessive quantities of alcoholic drinks have for their direct effect to quicken all the functions, to excite the pulse and animal heat, promote the flow of thoughts, and augment the muscular strength." It has not yet been proved by experiment that alcohol produces any such effect upon the pulse. It quickens it undoubtedly, and to the finger seems to increase its force; but observations made with the sphygmograph by Parkes and Wollowicz render it doubtful whether such is the fact. On the contrary, Zimmerberg found in a number of experiments on cats that it reduced both the pulse-rate and the pressure; but, as justly remarked by a judicious writer,† this result, so opposed to general observation, may have been due to the enormous quantities given. In moderate doses it assuredly acts as a stimulant, and only exerts a debilitating influence when poisonous doses are given.

In regard to the effect of alcohol upon animal heat, the testimony of those who have been engaged in researches on the subject is not uniform. Until within a few years professional and popular opinions about it were all one way. Nobody doubted that its effect was to raise the temperature of the body. This heating power, in fact, afforded men one of the excuses for using it as a drink when they were exposed to cold. But this property has been seriously called in question. I remember to have heard my father state, a great many years ago, that he had in his own person proved

* Therapeutics and Materia Medica, vol. i, p. 729.

† Dr. H. C. Wood, Therapeutics and Materia Medica.

the fallacy of the belief early in his professional life. He had never in his life, he said, been so near perishing from cold as he was one winter day of great severity, when, for the first time and the last, he tried to keep himself warm by whisky as he rode through the country visiting his patients. So fully was he satisfied that whisky had no power of warming the body that, strengthened by other and weightier considerations, he gave up its use, and was through life a teetotaler upon principle. The testimony of all arctic voyagers is opposed to the popular impression on this subject. I will only stop to cite a few authorities. Dr. Hays says that, according to his observation, "alcohol in almost any shape is not only completely useless but positively injurious" to men exposed to the rigors of the arctic regions. Sir John Richardson affirms that the men of the Hudson Bay Company bore up better under the cold and improved in health after spirits were entirely excluded. The statement of Dr. Rae, who has had ample opportunities for observing, is that the effect of alcohol during extreme cold is merely to purchase a temporary stimulus at the expense of subsequent great prostration.

Until of late, however, it was not suspected that alcohol under ordinary circumstances, and especially in disease, exerts a depressing influence upon vital temperature. The observation was made by Dumeril and Demarquay, in 1848, that in large doses it lowered the temperature of animals; and Lichtenfels confirmed the observation a few years afterward. He found that the heat of animals was uniformly depressed by alcohol in large quantities. But experiments in reference to this point have been contradictory. Parkes and Wollowicz, as the result of observations on a healthy soldier, conclude that alcohol increases the temperature of the body. Anstie found, as an average of his twenty experiments upon various animals, that the temperature during alcoholic poisoning rose more than three degrees Fahr.* Lombard experienced a rise

* Stimulants and Narcotics, p. 353.

of thirteen degrees in the temperature of his hand—that is, from 83° to 96°—after swallowing two ounces of rye whisky, but saw little effect from the spirits after his hand had reached its normal temperature. In experiments by Richardson the temperature of various mammals was raised half a degree by minute doses.

But the weight of the evidence obtained during the last few years, in which the inquiry has been so actively pursued, inclines the other way. I shall not stop to cite it, but only remark that Anstie, whose authority has been quoted for its calorifying power, insists strongly, in various numbers of the Practitioner, upon its power of reducing the temperature. As the result of what had been ascertained by Binz, Bouvier, Ringer, and Rickards, as well as by his own experiments, he says it may be concluded that alcohol in moderate doses causes a small, and in larger doses a considerable, reduction of heat.* In poisonous doses the effect has been very decided. The temperature of animals was found by Ringer and Rickards to fall as much as three degrees Fahr. when alcohol was given to the point of causing intoxication. Riegel, more recently, has added strength to the testimony on this point. His conclusions, as quoted by Dr. H. C. Wood, are as follows:

"1. Alcohol, even in moderate doses, in many cases causes a lowering of the temperature of the body. The amount of this diminution averages, as a rule, only some tenths of one degree. 2. Only exceptionally is there noticed an elevation of the temperature consequent upon the administration of alcohol. Not unfrequently, at least after minute doses, there is no noticeable change. 3. The diminution of temperature in convalescents is, as a rule, less than in healthy subjects, or it may be altogether wanting. 4. In those who habitually drink alcoholic stimulants the depressing influence of alcohol upon the temperature is almost always wanting. 5. The

* Practitioner, vol. xi, p. 424.

frequent repetition of the doses of alcohol diminishes their lowering effect upon the temperature. 6. The amount of diminution of temperature is directly proportioned to the dose of alcohol given. 7. The depression of temperature caused by alcohol is for the most part of but short duration, and the temperature soon returns to its previous grade."

It may be assumed from the various researches on the subject that another effect of alcohol is to diminish the animal excretions. This follows as the necessary consequence of lowering the temperature of the body. Whatever checks oxidation must reduce animal heat, and with it the excretion of waste tissue. If alcohol has any power to retard disintegration, it is obliged, as a part of the same process, to affect the excretions and the temperature of the body. Prout, who drew attention to this subject as early as 1813, remarked that the quantity of carbonic acid exhaled was materially less after taking alcoholic drinks. Dr. N. S. Davis has more recently shown that the quantity may be thus reduced fifty per cent. Nor is the effect confined to the lungs. Dr. Hammond has proved that the effect upon the kidneys is the same. Not only urea but the phosphates and chlorides were diminished in his case by alcoholic drinks. Experiments by Böcker tend to the same point. The results obtained by him may be stated as follows:

"1. The special action of alcoholic drinks is to arrest destructive assimilation, stop the overactive processes of life in their effects upon the organism; so that for a certain period during the stay of the alcohol in the system less urea, less phosphates, less water are excreted by the kidneys, less carbonic acid by the lungs, and less digestion goes on in the alimentary canal, showing that the muscles, bones, nerves, etc., are not getting rid of their effete tissue, but retaining it and making use of it as far as possible.

"2. But at the same time they give rise in the body to a defensive *reaction*, which is prominent first immediately after

taking the dose, then gives place to the special action, and on this ceasing is again manifested to a greater extent.

"3. So that if a suitable quantity be taken, and if both action and reaction be allowed to exhaust themselves before the dose be repeated, more manifestation of life, represented by more excretion, and more consequent renewal of the body, takes place in a given time with the alcoholic drink than without; there has been a positive gain in vitality.

"4. But if such large quantity is taken at once that the reaction is overpowered, or if it is arrested by a continuous repetition of the dose, the manifestation of life is kept down, the body is not renewed, because its effete particles are not removed, and the amount of vitality must certainly be reckoned at a loss." *

In these facts, illustrative of the physiological action of alcohol, we have, I think, a scientific basis for its administration in disease. They afford a plausible theory of its *modus operandi* in the morbid conditions to which clinical observation has shown it to be best adapted. It checks disintegration of tissue, and as a "fuel-food" stimulates the nervous system and generates the muscular energy by which respiration and the circulation are maintained, thus supporting life while the disease is running its destined course. Not only so, but in certain febrile conditions, presently to be noticed, it lowers the abnormal heat at the same time that it arrests the waste and acts as a cordial to the system.

Alcoholic stimulants have been so long the cardinal remedy in syncope, in severe injuries and surgical operations, and in all cases of sudden prostration, that they would continue to be resorted to in such emergencies whether sanctioned by theory or not, and their claim to the first place among therapeutic agents in such conditions may be regarded as fully established. But in other morbid states for which they are constantly prescribed their efficacy is not so universally con-

* British and Foreign Medico-Chirurgical Review, 1858, p. 240.

ceded. They are often undoubtedly of the greatest benefit in fevers, especially typhus fever, and yet they may be prescribed injuriously, and there are practitioners who would proscribe them altogether. I have seen them given in the typhoid state of malarial fevers, when those fevers were much more prevalent than they are at this day, with the happiest effect. One of the first cases in which I remember the practice, many years ago, made a deep impression upon me. The patient, a young man, took two pints of whisky in twenty-four hours, without any febrile excitement, and with manifest advantage. He recovered, and the happy turn in his disease was attributed to the alcoholic stimulant.

But it is in typhus and typhoid fevers, running through many weeks, and attended by rapid disintegration of tissue, while there is a great lack of nourishment, that these stimulants are especially indicated. They can not be given so early nor so invariably in typhoid fever, owing to the local lesions that attend this disease; but in both typhus and typhoid fever wine and other spirits have, I have no doubt, conducted the case to a favorable termination very often when death without them would have been the result. It is especially in the morbid conditions such as attend these fevers, where rapid waste is going on and but little food can be taken, that alcohol exerts its protective influence. When prostration, stupor, a brown tongue, petechiæ, and feebleness, softness, irregularity, and dicrotism of the pulse, are among the symptoms, it is clearly indicated. It is contra-indicated, according to Murchison, "in young patients, as a general rule, when its administration quickens the pulse; when the skin is dry and hot; when it increases instead of allaying delirium; when there is severe throbbing headache and active delirium, without much impairment of the force of the heart and pulse; when the urine is of low specific gravity, deficient in urea, or contains albumen, or when it is either scanty or suppressed." *

* A Treatise on the Continued Fevers of Great Britain, 1873, p. 280.

In many cases the feelings of the patient may be received as a criterion both as to the use of alcohol and whether wine or spirituous liquors are most suitable. Very often wine can be taken with advantage when spirits aggravate the symptoms.

I think I have not spoken too emphatically as to the utility of alcoholic remedies in certain febrile conditions, but I ought not to pass from the subject without adding that many able practitioners treat every form of fever without the use of alcohol in any stage of the disease.

Alcohol exerts a tonic influence in the stage of convalescence from fevers and other acute diseases, improving the appetite and digestion, and hastening the reparative processes. And here also the appetite of the patient may be taken as the best indication of the requirements in his case, and his taste should be consulted as to the character of the drink. Twice in my life I have had experience of the correctness of this principle of practice in my own person. When recovering from typhoid fever while a student of medicine in Baltimore I felt an urgent craving for brandy at a certain hour of the day, which continued to recur for several weeks, and in fact until I became alarmed, fearing that I had contracted a taste for drink; but it left me at last suddenly, and I had no return of the propensity until I was convalescing from an attack of remittent fever two years afterward, when I experienced the same desire for spirits. Fortunately it ceased, as before, on the full recovery of my health. I was in the habit of stating this case to my students, when I lectured on physiology, as an illustration of the principle that the appetite might be trusted as a safe guide in disease. One day, after relating it, I received a note from a member of the class saying that he had had an experience very similar to mine, but yet differing from it in one essential feature; "*the propensity had never left him.*" And herein consists a danger which should never be forgotten when we are tempted to prescribe alcoholic drinks in such cases.

The same remarks are applicable to the use of alcohol in pulmonary consumption. There are cases in which we can not doubt that it checks the progress of this disease, prolonging life many years, if it does not, with other appropriate remedies, cause obsolescence of the tubercles. The test for its use is its agreeing or not with the patient. When its effects are pleasant it is a most valuable remedy in phthisis, aiding digestion and invigorating the appetite, thus enabling the patient to take exercise, and improving the quality of his blood. But patient and physician must bear in mind that deliverance from one danger is purchased at the expense of another quite as serious. Many seeking safety from consumption in spirituous drinks have thereby become confirmed inebriates.

Delirium tremens is another affection in which theory suggests the use of alcohol, and clinical experience seems to have fully established its claim to be ranked as our most efficient agent in the disorder. Dr. Gerhard reduced the mortality among its subjects in the Pennsylvania Hospital from ten to less than one per cent by substituting the alcoholic for the opiate treatment. Solly, in his interesting work on the human brain, confirms this experience of Gerhard and others. He is in the habit of giving "the stimulus which the patient prefers, from being more accustomed to." It is proper to remark, however, that the testimony of the profession on this subject is somewhat contradictory. Murchison and other eminent authorities condemn the use of alcohol in delirium tremens.

In septicæmia it is claimed that alcohol, combined with quinine, exerts a decidedly beneficial effect. Professor Socin, of Basle, gave it in very large doses in septicæmic wound-fevers during the Franco-Prussian war, and under the treatment he saw, as he relates, "many unexpected improvements and even recoveries." Its effect was to reduce the pyrexial heat of his patients.

The late Dr. Todd, of London, a little over twenty years ago, acting upon the evidence of the power of alcohol to lower the animal temperature, prescribed it in large and repeated doses in fevers, and afterward in other acute diseases. The practice, though strongly opposed by most of his brother practitioners at home, soon spread abroad and obtained a wide currency in Europe and this country. It was founded on the doctrine that "all maladies should be regarded as more or less asthenic," requiring means that uphold the vital power. In pneumonia, as in fevers, this course was pursued, but, it is stated on the best authority, with very unsatisfactory results. Except indeed the sanguinary practice of Bouillaud, statistics prove that no other method has been so unsuccessful. In typhoid pneumonia the supporting treatment may be called for; but even in this type of the disease, which prevailed in our country as an epidemic sixty years ago, my old friend, Dr. Hogg, of Tennessee, thought he obtained good results from bleeding his patients *ad deliquium animi.* A disease which runs so short a course as pneumonia can hardly require agents to check disintegration of tissue and support the vital power; and if the aim be to reduce febrile excitement, no one, I suppose, will claim that alcohol, even in the largest doses, is so effectual in reducing temperature as veratrum or aconite, not to mention blood-letting.

A sense of comfort is imparted to persons troubled with nervous complaints by the cordial influence of spirituous liquors, and a dram before meals increases the appetite and promotes digestion in many dyspeptics; but nothing is more perilous than the habit of using spirits in such affections. Every practitioner of experience must be able to recall instances of persons ruined by the practice. Many such occur to my mind. So great appears to me to be the danger of intemperance from the habitual employment of spirits for a long time that I would discard their use in nearly all chronic complaints.

Spirituous liquors have been greatly abused by men on the plea that they ward off malarial fevers and other diseases. They are resorted to in every epidemic of cholera, and continued, the taste for them having been acquired, after the danger is over; so that it may be said every cholera-panic creates a host of drunkards. Alcoholic drinks have no prophylactic power. They prevent no disease, and invite an indefinite number. Annesley, after a long professional experience in India, declared "that the habit of dram-drinking destroys more lives in that country than the climate or the sword." In other climates the experience of medical men has been similar. The experiment was made in Holland of giving spirit-rations to four regiments, and withholding them from three selected for the purpose. "In the former case the sick in two of the regiments amounted to one in forty-four, in the third to one in twenty-nine, and in the fourth to one in forty-six; while in the latter the proportion of sick in the first regiment was one in one hundred and sixteen, in the second one in sixty, and in the third one in one hundred and fifty-eight." * There can hardly be a doubt that while a few persons may be able to use spirituous liquors for a great while with comparative impunity, their habitual use is injurious to health; and all physicians will agree that constitutions affected by their use succumb more readily to every form of disease.

It is a conclusion reached by life-insurance companies, as the result of careful inquiry, that the average life of teetotalers is about sixty-four years, while that of drunkards and moderate drinkers is thirty-five years and six months. Mr. Clark, in a recent discussion, in London, of the effects of alcohol, asserted that all the forces of the body are diminished by its use; and on the same occasion Dr. Drysdale affirmed on his own experience that beer-drinkers had a worse appetite, lost their sight earlier, and lived a shorter time than water-drinkers.

* Stillé's Therapeutics and Materia Medica, vol. i, p. 739.

Some one who was acquainted with the history of alcohol, and understood well its effects on men, has left these quaint lines concerning it:

"Is 'aqua' alcohol?
Yes; 'aquafortis:'
'*Aqua vitæ*' once;
Now '*aqua mortis.*'"

The lines contain a terrible truth most forcibly expressed. Alcohol when first introduced to the world in its concentrated form, during the eleventh century, was invested by the imaginations of men with a strange potency. Its vendors claimed for it the virtues of an elixir, of a catholicon, and physicians doled it out in guarded doses under the pretentious name of "*aqua vitæ.*" But, passing from the shops of the apothecaries into general use, it soon earned a title to the other name, "*aqua mortis;*" for what other agent known to men opens so wide an outlet to human life? That it can ever be brought under medical control or restricted again to its legitimate uses no one is visionary enough to imagine. Nevertheless grave responsibilities in relation to it still rest upon our profession. Physicians are bound by every consideration to prescribe it with a reserve that shall not encourage its use. They owe it to society and to themselves to study carefully the morbid conditions demanding it, and to employ it in no others. As has been correctly remarked by Professor Miller, of Edinburgh, "its power is limited to those cases in which a necessity exists for its use. Any other than its most guarded and anxious employment is both unscientific and unsafe." Prescribed, as we must believe it has been too often, without discrimination, it can not be doubted that in many instances it has done great immediate mischief, and in many more has led to a taste more to be feared than the disease for which it was prescribed.

LOUISVILLE.

A CASE OF WORMS IN THE URINARY BLADDER.

BY MELVIN RHORER, M. D.

Several weeks ago I was called in consultation to sound a gentleman supposed to have stone in the bladder. The patient, aged sixty-four years, was a farmer, who had for the past twelve months been affected with occasional interruptions to the flow of urine, which for the last three weeks had increased in severity, causing great pain in evacuating the bladder, and which now amounted to almost a total retention. His bladder was very much distended, he having passed no urine for forty-eight hours, except a constant dribbling of highly-colored urine, with an occasional drop or two of blood.

I easily introduced a catheter and evacuated the bladder, finding in the vessel about forty or fifty small red worms about half an inch in length, and having a number of legs arranged in two distinct rows from one extremity to another, and their bodies being encircled with numberless small cartilaginous rings. It was with some difficulty that I pressed a lancet through the body. In about two hours the patient, at my suggestion, forced a passage from his bladder, amounting to several ounces of urine, with about half a dozen more worms. No attempt was made to sound for stone, the diagnosis being too clear as to the cause of the trouble. We ordered spirits of turpentine internally, and the catheter to be employed daily. For the following ten days he passed from four to six worms at every action; since which time he has voided urine without the use of the instrument, and the discharge of worms has ceased. He has no pain on micturition, and is free from his late trouble, except a sense of soreness over the hypogastric region.

This case is one of special interest to me, since none of

the treatises on surgery which I possess even allude to worms in the urinary bladder. Will the editors of the American Practitioner enlighten me on the subject?

COLUMBIA, KY.

[In most of the recorded cases of worms in the urinary bladder the animal was of the lumbricoid or ascaridic variety, and was known to have found its way from the alimentary canal, its proper habitat, into the bladder, usually through some accidental communication between these parts. Three species of worms, however, which are peculiar to the bladder have been described; the *spiroptera*, the *dactylius aculeatus*, and the *diplosoma crenatus*. The first of these was discovered by Mr. William Lawrence* in the urine of a young woman, who passed during two years as many as a thousand of the little animals, that "varied in length from four to six inches, and were remarkably slender at the middle, from which they gradually increased toward the extremities, which were small and tapering. One of the surfaces of the body exhibited the appearance of a double row of small protuberances, while the other was marked by a groove with two rising edges. They were soft when first voided, and of a yellowish color. The body seemed homogeneous throughout, and careful microscopical observation failed to throw any light upon its organization."

Gross, in his masterly work on the Urinary Organs, gives a minute and very interesting description of the next variety, discovered by Mr. Curling, and named by him dactylius aculeatus because of its peculiar ring-like appearance: "The worm is of a light color, cylindrical in its form, annulated, and slightly tapering toward the extremities, particularly the anterior, which is the smaller. The female is four fifths of an inch long; the male two fifths. The head is truncated; the mouth orbicular; the neck distinctly annulated; and the

* Medico-Chirurgical Transactions, London, vol. ii.

tail, also annulated, is obtuse. The tegument, of a delicate transparent structure, and containing two layers of muscular fibers, one circular and the other longitudinal, is armed with a number of sharp-pointed spines, arranged in equidistant rows, in clusters of three, four, or even five. They cover nearly the whole surface, and seem to be perfectly under the control of the animal, which has the power of protruding and retracting them at pleasure. The alimentary canal commences at the mouth by three small convoluted tubes, which soon unite into a single one, which proceeds for some distance in a tortuous direction, when it becomes sacculated, and, enlarging as it descends, terminates at the extremity of the tail in a trilobular anus."

The *diplosoma crenatum*, of which it appears no perfect description has yet been given, is said to vary "in length from four to six or eight inches, and is thinnest in the middle, where it is bent at an acute angle upon itself, so that the two halves hang nearly parallel, and give to it an appearance as if two worms had been tied together by their heads." (Dunglison.)

Dr. Brigham, of Hartford, reports * the case of a woman who after an attack of typhoid fever voided two small worms from the bladder. Four years subsequently she again began to experience vesical annoyance, which continued for about twenty years, toward the latter part of which time her sufferings were extreme. She was finally relieved by passing "a round white worm about six inches long."

One of the most remarkable cases of vesical worms on record is that reported by Dr. Bardwell, of Indiana: † "The patient, a man, aged thirty years, had been subject from his earliest infancy to attacks of intermittent fever, and for some years past he had suffered under severe pain in the bladder and difficulty in urinating, attended with all the usual symp-

* American Journal of the Medical Sciences, 1837.

† Gross on the Urinary Organs.

toms of stone. His digestive organs had become greatly deranged, and his general health had much declined. Various plans of treatment had been pursued without any material advantage, until one day, while laboring under the effects of a large dose of castor-oil and spirits of turpentine, he voided upward of seventy lumbricoid worms. Before the effects of the medicines had passed off numerous worms were discharged by the urethra, accompanied by bloody urine and great distress in the passage. They were from six to nine lines in length, and about the thickness of a horse-hair, with a black and rather large head, their color being of a dark, dirty-white. They possessed considerable activity, could crawl about on the ground or on the floor, and many of them lived twenty-four hours after they had been voided. They continued to be discharged for more than six months, many thousands coming away during this period. The urinary disease gradually subsided, the general health rapidly improved, and eventually the man entirely recovered. The use of turpentine, which was kept up for some time, seemed to have been of the greatest benefit in this case."

The worms removed by Dr. Rhorer do not appear to be identical with the species described by either Mr. Lawrence or Mr. Curling, but rather to resemble those passed in the following case related by Dr. Campbell:* "A man, sixty-five years of age, passed in the space of three weeks thirty small red-headed worms, not more than half an inch long. Their bodies were made up of a great many minute cartilaginous rings, and were furnished with a number of legs, arranged in two distinct rows, extending from one extremity to the other. They were hard, very active, strong, and remarkably tenacious of life. Two of them, inclosed in a quill and carried in the pocket, were at the end of four weeks as lively and vigorous as at the moment when they left the bladder."

The only diagnostic sign of vesical worms is, as Dr. Gross

* Op. cit.

justly remarks, the presence of the worm itself. The same high authority thinks that entozoa infesting the bladder must be beyond the reach of drugs by the mouth, and considers the mode of treatment which promises most is that by stimulating injections into the bladder, the organ being first emptied of urine. Frequent catheterization has often been sufficient to cause the expulsion of the pests. A case is related where a number of worms were removed by means of Hunter's forceps from the bladder of a young woman.]

CONTRIBUTIONS TO OBSTETRICS.

BY THEOPHILUS PARVIN, M. D.

Retroflexion of the Pregnant Uterus.

Case I.—Mrs. —— consulted me in March, 1874, in consequence of severe leucorrhœa, pelvic pain, and rectal tenesmus. She had been an invalid since the birth of her only child, about two years previously, and presented not only a very anæmic condition, but also had those various sympathetic disturbances so characteristic of uterine disease. Menstruation had not occurred for nearly six weeks, and this was the only indication of the possibility of pregnancy; but considering her exhausted condition, the profuse leucorrhœa, and a well-marked retroflexion of the uterus, it seemed to me that the possibility was negatived. Several times I endeavored by manipulation—almost constantly by the horse-shoe pessary, and twice by the uterine sound—to restore the uterus, but failed. Local treatment then was limited to occasional applications to the cervix and the wearing a pessary. In six weeks from the time I first saw her, and quite a month after the last introduction of the uterine sound, she aborted; a result which probably was not to be regretted, for I do not believe the uterus could have been in any way lifted from its abnormal position. The retroflexion still persists.

Case II.—In May last I saw a lady, in the northern part of the state, suffering with similar symptoms, only menstruation was regular.

She had been confined once. Suggesting to a medical relative the treatment which seemed to me advisable—a treatment that I afterward learned was not carried out, in consequence of the protracted illness of her child—I did not see her until some months after, when she came to consult me because of a supposed pregnancy and an increase of the special troubles attributed to the retroflexion. She had missed her "periods" twice, and had many of the usual signs of pregnancy. I could easily, with two fingers in the rectum and one in the vagina upon the anterior portion of the cervix, restore the uterus partially, but immediately upon the withdrawal of the fingers it fell back into its malposition. The only treatment instituted was frequent evacuation of the bladder, several times each day assuming the knee-and-face posture, and the use of Hodge's pessary. In about two months she visited me again, and I found the retroflexion quite gone, while the uterine globe could be readily felt in the hypogastric region.

Remarks.—More than a century ago William Hunter described a case of retroversion of the pregnant uterus, which terminated fatally; and subsequently, in the year 1776, he published a paper upon the subject, alleging as the usual cause of the accident a distended bladder, and teaching that this accident was sudden in occurrence. He made three degrees of retroversion; viz., first, the uterus may be fully retroverted; or second, half retroverted; or third, so far in its natural state that the orifice of the uterus shall be downward. It will be observed that the third of these varieties would now not be termed retroversion, but retroflexion.*

The teaching of Hunter in this regard governed the views of obstetricians until quite recent years. In 1860 Tyler Smith, in an able paper presented to the London Obstetrical Society, challenged the correctness of that teaching, asserting that "the impregnation and development of the uterus previously retroverted is the common and ordinary way in which gravid

* The term *retroversion* was first applied by Gregoire, professor of accouchements, Paris, 1747, to the displacement posteriorly of the pregnant uterus; and Puech remarks (*Gazette Obstétricale*, August 20, 1874) that this term is not quite accurate, since retroflexion produces the same effects, etc., and that more than one half the cases are examples of this displacement, and not of retroversion.

retroversion is produced; that it does not occur suddenly, except in very rare and exceptional cases, but is the result of the gradual and progressive increase of the retroflexed or retroverted uterus after conception;" and this view is generally held by the profession to-day. And certainly in one of the cases we have narrated the displacement was antecedent to conception (probably the same was true of the other also), and illustrates the correctness of Dr. Smith's assertions.

The case in which abortion occurred illustrates another truth established by frequent observations: a woman with a retroflexed uterus is peculiarly liable to abort. But suppose abortion does not occur, what is the subsequent history? Probably in the majority of instances spontaneous restoration occurs, the growing uterus finally and gradually moving in the direction of least resistance, helped thitherward, it may be, by the contraction of some at least of its normal supports. This result not obtaining, death may succeed from peritonitis, from uræmia, or from gangrene of the uterus, of the vagina, of the rectum, or of the bladder. (Puech.) With such possibilities before him the practitioner has no right to trust a retroflected pregnant uterus to the chances of nature remedying the deviation. The restoration too, whether effected by art or by nature, is rarely if ever immediate. Adopting the language of Dr. Barnes in reference to these cases, we may say that the great remedy for retroflexion is a Hodge's pessary. It will probably be necessary to change the pessary occasionally, introducing one of a larger size, or increasing the curvature of the short arm of the lever. How long should this be worn?* When the uterine globe is distinct and prominent in the hypogastric region it is doubtful if the pessary

* Some have advised wearing the pessary up to the fifth month. As the length of the uterus at the end of the fourth month is from five and a half to six inches, materially exceeding the longest diameter of the superior strait, it must be obvious that the uterus then in normal position could hardly be retroverted or even retroflected so as to enter the pelvic cavity.

can be of any further use. Furthermore, the patient should be enjoined not to lie upon her back, but upon her right side or on her face, and once or oftener each day take a position upon her knees and elbows or chest.

PLACENTA PRÆVIA—INDUCTION OF PREMATURE LABOR.

Mrs. K., seven months advanced in her first pregnancy, sent for me in consequence of uterine hemorrhage. This hemorrhage, which was quite copious, was temporarily restrained by an alum-and-cotton tampon. It recurred occasionally and moderately during the succeeding two weeks, when another and larger flow took place, so that her cheeks were quite blanched and her pulse was feeble. There was an entire absence of uterine contraction. Believing that the ordinary obstetric practice, *tampon and temporization*, would involve greater peril to both mother and child than early delivery, I determined to induce premature labor. Dilatation of the os was effected by Molesworth's dilators, and when the dilatation gave a circle about two inches in diameter—this being accomplished in three hours, during the last of which regular uterine contractions occurred—I passed a finger up on one side, between the placenta and the uterus, and ruptured the membranes. In two hours and a half the head was well down in the pelvic cavity and the os sufficiently dilated. I completed the delivery with Churchill's forceps. The child, though very small and feeble, has done well, and so has the mother. The placenta was remarkable not only for the lateral instead of central attachment of the cord, a battledore placenta, but also from its unusual shape, measuring ten inches and a half in one direction and five transversely. The great mass of it was attached to the left side of the uterus, then extended over the internal os, and up on the right side at least two inches.

Remarks.—The treatment of *placenta prævia* is by no means settled, though, as we have before said, temporization and the tampon combine the practice inculcated by most authors to guide the physician called to a case prior to the completion of pregnancy. Leishman, in his excellent work on obstetrics, remarks that when "the fetus has reached the period of viability we endeavor to avert premature delivery as long

as possible, in order to give the child the best possible chance;" and this may be taken as probably representing the general opinion and practice of the profession.

On the other hand, Dr. T. G. Thomas, in a very able article in the New York Medical Journal, February, 1870,* declared it his "conviction that in every case of declared placenta prævia premature delivery should be induced."

We believe that the rule asserted by Dr. Thomas is much better than that of Dr. Leishman, and that its general observance would save many a life. The mortality to mothers, according to the statistics collected by the late Prof. Simpson, is about one death in three, while sixty-nine per cent of the children are lost. In Johnson and Sinclair's Practical Midwifery (London, 1858) twenty-four cases of placenta prævia are given, six mothers and thirteen children dying. Dr. Barnes, in 1864, in sixty-four cases coming under his observation, states that only twenty-three of the children were born alive. Dr. Greenhalgh, in the paper to which reference has already been made, has collected three hundred and fifteen cases; fifty-eight of the mothers dying, and one hundred and ninety-three of the infants still-born. However much these statistics may vary in the percentage of deaths of mothers, they all agree in making that of infants more than fifty per cent.

Now can we not, ought we not, by the induction of premature labor in every case of placenta prævia where hemorrhage after the seventh month is either so violent or so frequent that the lives of both mother and infant are in jeopardy,

* The language of Dr. Thomas is only a little stronger than that of Dr. Greenhalgh six years earlier (Transactions of the Obstetrical Society, London, vol. vi), but the lesson is essentially the same. Dr. G.'s language is as follows: "That in any given case of hemorrhage due to placenta prævia occurring after seven and a half months of utero-gestation, when the child is viable, it is expedient both for the safety of mother and child to expedite labor, unless the condition from exhaustion be such as to preclude this step—and if so, then as soon as possible after she has recovered from the shock—by every means in our power," etc.

with the probability that the latter will be lost, conjure away this common peril? And if this be conceded, it will also be acknowledged that our art should be an imitation of nature; an imitation of nature, first, in the dilatation of the os by hydrostatic pressure; an imitation of nature, again, by retaining the bag of waters intact until the os is considerably, not necessarily *completely*, dilated and dilatable; an imitation of nature, finally, in abstaining from ergot altogether, or at any rate until there are demand and opportunity for expulsive, not dilating pains. Remembering that the mortality to infants when premature labor in general is induced by puncturing the membranes is not less than twenty per cent, this practice does not seem the best in the accident we were here considering, if the life of the child is an element to be regarded in our therapeutics. So too ergot is objectionable in the same view, unless in the conditions mentioned.

Another rule which the case narrated is designed to illustrate is the early application of the forceps. While we may not be willing to accept as demonstrated the statement of Dr. Thomas* that the child depends "for the aëration of its blood upon a crippled and bleeding placenta" in so far as he attributes hemorrhage to this organ — the peril to the mother is from hemorrhage, to the child from suffocation, as Schroeder expresses it, and the "crippling" of the placenta is not from loss of blood, but from insufficiency of that portion still in relation with the uterus for the maintenance of its function — yet all must acknowledge the longer the second stage of labor the more the infant's life is in jeopardy. Now we have no means to abridge that stage so certain and so safe as the forceps. Finally, the statistics of podalic version, as it regards mothers or infants, are not so encouraging, nor is the operation in such cases always a matter of so easy performance, that the practice should be followed save by exception.

* Op. cit.

RUPTURE OF THE PERINÆUM—IMMEDIATE OPERATION—SUCCESS.

Mrs. K., a healthy woman, about thirty-five years of age, was in labor with her fourth child, when, as happened in her previous labors, there was delay in the second stage of labor. As in two of those labors I had delivered with forceps, I applied them in this; but finding when the head was brought down upon the perinæum that there was no yielding of that structure, I removed the instrument, determined to wait upon nature, very much against the patient's remonstrances, who was earnest for an immediate delivery. In two hours more the head was born, but the perinæum and recto-vaginal wall for two inches and a half tore like a piece of wet blotting-paper. The accident occurred about two A. M., and I waited until the morning light was sufficient to see to operate. The operation was simply drawing the recto-vaginal rent together by two silver sutures, and the same number for the perineal. The after-treatment consisted in fastening the patient's limbs together by a bandage about the knees, requiring her to lie upon one or the other side, catheterizing the bladder morning and evening, and by opium preventing evacuations of the bowels. At the expiration of eight days, after having had the bowels moved by castor-oil and a warm-water injection, I removed the sutures, and to my most agreeable surprise found the restoration perfect.

Remarks.—Rupture of the perinæum is to the practitioner one of the most mortifying accidents of parturition, and to the patient, if the rupture extend through the anal sphincter, it is both a serious annoyance and disability. The question of an immediate or of a secondary operation is one which at once suggests itself to the practitioner. The weight of authority is very decidedly in favor of the former. Dr. Thomas remarks,* "I have in a number of instances resorted to immediate operation, and the result of my experience leads me to always adopt it, unless the sphincter ani and the recto-vaginal wall be implicated in the laceration to such an extent as to make the operation a serious and a lengthy one, or to insure the passage of lochial discharge between the lips of the

* Diseases of Women, 4th ed., p. 130.

wound." And Dr. Barnes remarks,* "When laceration of the perinæum is detected at the time of its occurrence it is best to stitch it up at once."

We confess we can not see the force of the exception to operating which Dr. Thomas makes, for it would seem to be just those cases where the sphincter ani and recto-vaginal wall are implicated that most imperatively demand an immediate operation; a less lesion may heal spontaneously, or may be no permanent or ultimate inconvenience; and it may be doubted as to the introduction of two or three more sutures materially rendering the operation more "serious and lengthy," while the insinuation of lochial fluid between the lips of the wound is not any more likely to occur at one point than another of its line of transit. The patient should be kept upon her side after being operated on, and thus this accident will be measurably prevented. The condition of the tissues involved and the patient's state are elements to be considered in deciding for or against immediate restoration of the perinæum.

While we can hardly hope for a natural cure where the sphincter ani and the recto-vaginal wall are involved in the rupture, yet in the *Annales Gynécologie* for September, 1874, p. 233, Dr. Bleynie narrates a case where such rent occurred from the use of the forceps, and yet this rent healed *spontanément et intégralement.* However, such a happy result is so completely exceptional that the practitioner has no right to depend upon its repetition.

Were we formulating a rule as to the cases in which an immediate operation is required, it would be, for reasons already indicated, almost diametrically opposed to that which has been quoted from Dr. Thomas, although, of course, the conclusion of this eminent writer and practitioner is right if the correctness of his premises be conceded.

*Clinical History of the Diseases of Women.

Uterine Inversion—Reduction.

On the 9th of last October I was called to visit Mrs. C., twenty-two years of age, in consequence of her suffering with menorrhagia. This disorder dated from her first and only confinement, which occurred September 2, 1873. Information was further given me that after a labor of fourteen hours her child was born, but that in the removal of the placenta severe pains occurred; she, screaming from the suffering, sprang up in the bed in a sitting posture, flooded and fainted. Furthermore, I learned that there had been some doubts and differences of opinion among various medical gentlemen who had seen her since her illness commenced. The treatment instituted and the treatment proposed during that illness I refrain from mentioning, as unfortunately a suit for malpractice has been commenced.

The patient presented marked anæmia, as would readily be imagined when it is known that her menstrual flow ordinarily lasted from twelve to fourteen days, and was profuse; sometimes indeed there was hardly a day in the month when she was free from hemorrhage. Exhausted by this drain, discouraged by the discrepancy of medical opinion in reference to the nature of her malady, as well as the failure of medical treatment hitherto to materially benefit her, her request was simply for treatment to lessen the menorrhagia.

Examination proved that she had inversion of the uterus; and upon my assurance that I believed reduction could be accomplished both she and her husband readily consented to have the attempt made. Five days after my first visit, assisted by Drs. Patterson, Walker, and Henry Jameson, and the patient being anæsthetized, I made my first effort to reduce the inversion. The effort was by the different methods of taxis,* and was continued for two hours, and each of the gentlemen in turn tried. We all failed, or at any rate only partially succeeded. I endeavored to retain the slight advantage gained by pressing against the fundus the concave end of a stethoscope covered with flexible rubber, the instrument being held in position by a T-bandage. At the expiration of twenty-four hours the instrument, causing so much distress, had to be removed. Copious cold-water injections were directed to be used daily, and at the expiration of a week I applied a curved rubber rod with a

* Among these were Courty's and Noegerath's.

"cup" to receive the fundus, and its external extremity secured by a rubber band, so that continuous *elastic* pressure, as proposed and practiced by Dr. Barnes, might be tried. In forty-eight hours this instrument too caused so much distress that it had to be removed. As menstruation was near, no further effort at reduction was made until five days after this had ceased.

On Saturday, the 14th of November, assisted by the gentlemen whose names have already been given, and the patient being profoundly under the influence of a mixture of ether and chloroform, another persevering attempt at reducing the inversion was made. At first the uterus was manipulated with the left hand, alternately expanding and contracting, with slight upward pressure, until the size of the organ was thus lessened; then the *repositor* of Dr. White was introduced, and steady pressure, with suitable counter-pressure, was made for nearly two hours. Still the uterus was unreduced, and upon withdrawing the repositor the organ seemed smaller and quite hard. I then introduced a pair of Bond's placenta-forceps (the blades of which had been previously prepared for this emergency by thickly covering their extremities with chamois-skin), grasped the uterus with them, then expanded the blades, making alternately approximation and separation, with the former also some upward pressure. Quite a free hemorrhage followed this operation, which was continued about ten minutes, and the uterus again was quite soft and relaxed. The forceps were now replaced by the repositor, and pressure resumed. Within ten minutes restoration was accomplished so far as returning the uterus within the os, and thereupon removing the instrument the fundus could be felt just within the latter like a descending polypus; then a rectum-bougie pressed against this presenting fundus almost immediately caused its ascent to its normal place, and the reduction was completed—completed in just two hours and a half from the commencement of the administration of the anæsthetic mixture.

The patient's convalescence was all that could be desired; menstruation has become normal; the uterus, which for some weeks after the operation was retroverted, is in natural position; and she is now, I believe, quite as well as could have been anticipated after her protracted suffering.

I ought to have stated that immediately upon recovering from her anæsthesia the patient had one fourth of a grain of morphia hypodermically, and the next day quinia and opium every two

hours, with turpentine stupes to the abdomen, and tepid mucilaginous injections into the vagina.

Remarks.—It is not proposed to make any extended remarks upon this case, the successful issue of which has been a source of such great happiness to all parties concerned, and which adds another to the long list of reductions of chronic uterine inversion.

To one who studies the histories of such reductions it must be evident that no one method should be followed to the exclusion of all others. Even so rude a method as that observed by Carter, physician of the French consulate at Tangier, was successful; the patient suspended head downward, two stout men holding her up by her feet, while a bottle of oil was poured into her vagina and pressure made. Martin, of Orleans, in 1853 reduced an inversion in thirteen days simply with cold water. The air-pessary succeeded in the hands of Tyler Smith and others; elastic pressure in those of Dr. Barnes. The repositor of Depaul at one time succeeds in his hands; and in another, in a case attended by himself and Nélaton, November, 1860, perforates the uterus, and the patient is dead in two days.

But one of the most remarkable facts in the study of inversion is that months and even years after the accident has occurred the uterus has restored itself—spontaneous reduction occurred. Several such cases are recorded in Dr. Hodge's Obstetrics. Comparatively recently such a case occurred at Breslau under the observation of Spiegleberg, the displacement having existed for more than two months.* But such happy accidents are so rare, so improbable of repetition, that they can furnish no rule of action or excuse for abstinence from action.

However operators may differ as to methods, whatever successes each may claim, there is hardly one among these methods that has not now and again been followed by a fatal

* *Gazette Obstétricale*, August 20, 1874.

result. Nevertheless I wish to express my decided preference for the repositor of Dr. White over the various methods of taxis, and to commend its faithful trial to all who in a given case find other means futile, or who shrink from the various methods of taxis, which when used by coarse and clumsy hands and brutal force may, possibly has, inflicted fatal injury. The failure in my case of taxis and of elastic pressure, and subsequent success chiefly with the repositor, presents a strong evidence in its favor.

Another point of interest in the history reported is the retroversion of the uterus for some time after the cure of the inversion. I believe it will be found, as a *rule*, that the uterus after the reduction of a chronic inversion will be for a time retroverted or retroflected. The reasons for this must be obvious to any one who considers for a moment the agencies which prevent such accidents, and how under months of stretching they have been elongated and temporarily lost their tonicity. In the case quoted from Spiegleberg a slight retroversion is mentioned as having succeeded the reduction. I trust professional attention may be directed to the point suggested, and by and bye facts enough will be collected to prove its truth or its error.

Any consideration of the causes and consequences of uterine inversion and its diagnosis would too much protract this paper already longer than the author intended.

INDIANAPOLIS.

TWO CASES OF TRAUMATIC PARAPLEGIA.

BY GEORGE N. MONETTE, M. D.,
Physician to St. Anna's Asylum.

CASE I.—A colored man, aged forty-five years, of immense physical development, was admitted into the Charity Hospital with a fracture of the eleventh dorsal vertebra. He was a somnambulist, and on the night of the 7th of December he ventured over a dilapidated portion of a balcony, lost his footing, and fell across a fence, causing the fracture above named. There was a complete dyæsthesia of the inferior extremities, with entire loss of motor power, paralysis of both the vesical and rectal sphincters; in fact there was complete (traumatic) paraplegia. I gave him a powerful cathartic, which proved inert. I then resorted to rectal enemata, and to the use of the catheter, three times daily. His urine was of a highly sanguineous appearance, yet after a day or two it was more transparent. Some dyspnœa was evident on the fourth day, but was relieved by external applications. He did not suffer much pain. When necessary an anodyne was given. Within ten days gangrene appeared at the great toe, which soon involved the entire foot. Deep bedsores formed on both nates. He survived the accident twenty-two days.

CASE II.—Wm. Donohoe, white, aged thirty years, laborer, was crushed by a cotton-bale falling a distance of thirty feet upon him on December 24th. He was admitted December 27th. I used the catheter at once, as his bladder had been distended since the injury. The case was similar to that of the first. He seemed to suffer greatly, and an anodyne was given. January 12th, a perineal abscess formed; ulceration about the orifice and extending to scrotum; œdema of penis and prepuce. January 16th, sloughing of scrotum continues. January 17th, a portion of nates separated. January 19th,

more of the scrotum follows; patient in a semi-comatose condition. January 20th, suffers great oppression. January 22d, sloughing of nates complete; changed frequently from side to side. January 23d, dozing; urine dribbling; a scybalous stool voided unconsciously. February 5th, gradually succumbing; emaciation complete in lower extremities. He died on the 17th of February, 1870, surviving the injury fifty-two days.

NEW ORLEANS.

AN EXTENSIVE EPITHELIOMA OF THE LIP REMOVED BY SULPHURIC-ACID PASTE—NO RETURN AT THE EXPIRATION OF TWENTY-ONE MONTHS.*

BY PINCKNEY THOMPSON, M. D.

Mr. E., a wealthy planter of Henderson County, fifty-five years of age, consulted me in September, 1863, about a growth or formation on the lower lip, which caused him some inconvenience. He described it as a hard, dry scab, which would become detached and fall, leaving the denuded surface very sensitive, and causing sometimes a very slight bleeding. Another scab would soon form and run a like course. The period of these changes was variable, sometimes occupying but two or three weeks, again extending through several months. I advised the immediate removal of the growth, but the patient would not consent.

I did not see Mr. E. professionally again until the summer of 1865, when my attention was specially called to the lip trouble. The sore had now visibly increased in size, having invaded the lip below its red border, and forming a hard, gristly tumor about the size of an ordinary army-bean. I advised the patient to give up his cigar—he was an inveterate

*Read before the Henderson Medical Club.

smoker — and again insisted on removing the tumor. The cigar was discontinued, but the operation was declined.

I heard little of the case from that time until November, 1872, when, being called in to see another member of the family, I learned to my surprise, and I may add regret, that Mr. E. was at that moment in an adjoining room with a "cancer doctor" from somewhere in Indiana, who was attempting to remove the tumor with a caustic which he professed to have invented. This "caustic," according to the charlatan's story, had, of course, cured its hundreds without a single failure. In this case, however, it did fail after two trials. In fact it not only failed to relieve or remove the tumor, but caused fearful and fruitless suffering, and certainly seemed to aggravate the disease, the local irritation following its use appearing to increase the size of the tumor with great rapidity; it also increased the pain.

The following March, 1873, Mr. E. consulted Dr. D. W. Yandell, who concurred in the opinion that it was epithelioma, and advised its immediate removal. My patient, preferring to have this done at home, returned; and on the urgent recommendation of Dr. Hanna and myself, fortified by Dr. Yandell's opinion, he at last consented to an operation; but had such a dread of the knife, and insisted so on the use of a caustic, that we yielded to his strongly-urged preference.

On May 21, 1873, assisted by Dr. Hanna, I applied, as Dr. Yandell had recommended should be done, the sulphuric-acid paste * to the entire mass, which at this date included almost

* This paste is described in the American Practitioner for August, 1871, under the title of "Michel's process for removing external tumors," and is made and applied in the following way: Asbestos, as soft and free from grit as possible, is reduced by rubbing between the hands to the finest possible fleecy powder. It is then mixed thoroughly with three times its own weight of strong sulphuric acid ($S O_3 H O$). A mass is thus formed which may be easily worked with a silver or gold spatula into any size or shape corresponding to the tumor to be destroyed. In the application of the caustic the adjoining healthy parts of the skin are carefully protected by applying a zone of collodion and pads of linen, and the patient is so placed that the surface of the tumor is perfectly level. The saturated acid

the whole of the lower lip. After protecting the sound tissues by means of adhesive plaster, I proceeded to apply the caustic, by means of the handle of a silver spoon, layer upon layer, until it reached one fourth of an inch in thickness. The pain which ensued was somewhat severe, but lasted only about forty minutes. Destruction of the entire cancerous tissue soon followed, and by the next morning seemed to be complete. I now directed flaxseed poultices, in order to hasten the detachment of the slough. Eleven days elapsed, however, before the whole of the slough came away, leaving, to my great gratification, a healthy granulating surface, which under a few applications of a solution of nitrate of silver (ten grains to the ounce) healed rapidly and perfectly. Because of its supposed virtues in such affections, I put my patient under a course of arsenic, which was continued for four or five months.

In conclusion, I am glad to be able to state that Mr. E. has remained in excellent health, never having had the slightest indication of a return of the growth since its removal, now twenty-one months ago.

HENDERSON, KY.

asbestos is then laid on the surface to the necessary thickness. Rapid destruction of the tissues follows, with, after the first half hour or so, but little pain. An oozing of clear watery fluid appears, which must be carefully sopped up. After twelve or fourteen hours' action the first application is to be removed, and, if necessary, a new portion of smaller size adapted to the sore. After this has been applied for twelve hours the operation is complete, and the healing of the deep excavation alone requires to be attended to.

Reviews.

Pulmonary Tuberculosis: Its Pathology, Nature, Symptoms, Diagnosis, Prognosis, Causes, Hygiene, and Medical Treatment. By ADDISON P. DUTCHER, M. D., late Professor of the Principles and Practice of Medicine in the Cleveland Charity Hospital Medical College, Ohio. Phila.: J. B. Lippincott & Co. 1875.

Dr. Dutcher states in the preface to his work that he does not claim for it any special originality, and adds the very doubtful proposition that it will not be any the less valuable to the profession on that account. A book indeed might be eminently original without containing much truth, and consequently be nearly worthless; but certainly its value is in exact proportion to its originality, supposing the original views it offers to be true as well as new. Pulmonary Tuberculosis is one of the last subjects on which we should look for originality, discussed as it has been by so many able observers and writers in the last half century; but it is one of such importance that we can easily pardon an author who comes with even the scantiest store of facts to enlarge our knowledge concerning it.

The originality of the work before us consists in certain opinions as to treatment, and in the discussion of matters bearing remotely upon tuberculosis, rather than in any observations on its nature, pathology, hygiene, or cause. The author holds, with most American and English authorities, that tuberculosis is not of an inflammatory origin, but a blood-disease, which shows itself first in disorders of the digestive apparatus. And yet, as he remarks, we see patients who suffer with dyspepsia during a life-time without becoming consump-

tive; and, on the other hand, it is not an uncommon thing to meet with tubercle in new-born children; so that the blood dyscrasia can not be dependent wholly upon indigestion.

As an early symptom of tubercular disease Dr. Dutcher attaches much importance to Thompson's gingival margin. Out of two hundred cases he found it in one hundred and seventy-five. The line deepens, according to his observation, as the disease progresses, assuming at last a vermilion tint. The early appearance of it he regards as an unfavorable circumstance. This margin around the gums has enabled him in many cases to detect tuberculosis in its pretubercular stage, and to meet it when most curable. It is a good sign when the streak disappears under treatment. In regard to the gingival margin his conclusions are these: 1. It is an unfailing sign of the tubercular diathesis; 2. When present, no matter how obscure the other symptoms of pulmonary tuberculosis may be, we may with certainty predict it at no distant day; 3. No matter how favorable the other symptoms, treatment must not be discontinued until the streak has wholly disappeared.

Dr. Dutcher is fully convinced not only that tubercle may be absorbed, but that cavities may be healed, and large cavities more readily than small ones. He is not prepared to reject altogether the contagiousness of pulmonary consumption. As to climate, he insists correctly that cold is not in itself a cause of tuberculosis. Texas, particularly the southwestern portion of it, is his favorite residence for consumptives in winter. His remarks on clothing and on the hygienic treatment of phthisis are highly judicious; but he goes more into details about the constitution of the atmosphere than was necessary in a work on pulmonary tuberculosis, and tells what every student of medicine is presumed to know about the changes effected in the air by respiration.

In reference to alcoholic drinks in phthisis, his opinions are extreme; and we are compelled to add that what he has

written on this head proves him to be unacquainted with the last researches on the subject. His reading appears to have stopped with the memoir of Lallemand, Perrin, and Duroy, the conclusions of which have been thoroughly disproved by later experimentalists. His own experience is that alcohol has no power to arrest or retard tubercular disease; and he questions whether alcoholic drinks do not, on the contrary, hasten its fatal march. He denies that alcohol is consumed in the body; scouts the idea that it can in any sense perform the part of a food; and, in the face of all the recent observations made respecting it, asserts that "it goes into the blood alcohol, and comes out the same." "Some writer," he continues, "has had the *audacity* to affirm that alcohol acts in the same manner as cod-liver oil, by supplying respiratory materials and increasing the fat of the blood;" and then he goes on to say, "I do not see how it ever entered into a sane man's brain, *unless the devil put it there*, that alcohol was food. The idea is a delusion, a phantom of an intoxicated brain!" And, as if all this random assertion were not bad enough, he adds, "I have most generally found that those writers who recommend alcohol as a beverage are more or less addicted to its intemperate use!"

This is what Dr. Dutcher styles "ventilating" the subject of alcohol, and he evidently knew what he was about; it is wind, a good deal more than light, that he has brought to bear upon the subject. His assertion that alcohol is unchanged in the body he will find negatived by a multitude of experiments, and will perhaps conclude that the idea of its being a sort of food is not wholly preposterous. Whether it is useful in phthisis is another question, and one respecting which the opinions of practitioners are not in full accord. A longer experience with it is necessary fully to determine the matter, but the practice has the sanction of many able and experienced physicians. But that alcohol in the changes it undergoes in the system may prove a source of vital energy, sup-

porting the patient, and protecting his organization against the wasting effect of oxygen, there is assuredly no audacity in affirming. But the various questions in dispute have been so fully discussed in another article in this number that we deem any further statements here unnecessary. Before Dr. Dutcher ventures to write again he will do well to inform himself as to the present attitude of these questions.

Of the style and manner in which this book is written we have perhaps afforded our readers sufficient means of judging in the few quotations we have made. The intemperance of the language is something strange in a professional work and in the discussion of matters relating to science. This, however, we can in some sort overlook in view of the zeal inspired by his theme. We can tolerate great warmth in a writer whose mind is aglow with the evils of alcohol; but we can not pardon such writing as we find in many of the chapters of this book; in that, for example, on the "Power and Grandeur of the Mind," running thus:

"How wonderful, how complicated is the human mind! Who can portray the magnificence of its powers or the vastness of its comprehension? Think for a moment of its capabilities and the grandeur of its achievements! Man has but to will, and in an instant his mind is soaring with a velocity which leaves the flashing light of heaven far behind *his speed.* At will he mounts to the starry heavens, and, wrapt in wonder and admiration, gazes on the sparkling gems of night!"

Nor this, on "the sentiments:"

"Take a case of disappointed love. See that delicate and emaciated female; she is on the brink of the grave. I knew her when the rose of health bloomed upon her cheek, and hope danced before her captivated vision in the sunshine of coming prosperity, and joyous anticipation painted in glowing colors the veil of futurity. . . . If this earth ever gave birth to an angelic spirit, it was *she.* But in an unlucky moment she received a blow, from which she has never recovered. Disappointed love has crushed her heart. At the very moment expectation stood on tiptoe the

idol of her soul eluded her grasp. The blow was too severe, and phthisis is now consuming her vital powers, and death is waiting for its victim."

In a certain class of novels we have no doubt this would be considered by their juvenile readers very fine writing, but we hold it to be quite out of place in a book on pulmonary tuberculosis; and accordingly our advice to Dr. Dutcher would be to draw his pen remorselessly through all such passages as these when he sits down to prepare a second edition of his work. So much of its originality we must consider decidedly objectionable, as relates to professional men at least, however it may be adapted to the general reader, for whom in fact it seems to have been written. L. P. Y.

Introductory Lecture of the One Hundred and Ninth Session of the Medical Department of the University of Pennsylvania. By ALFRED STILLÉ, M. D., Professor of the Theory and Practice of Medicine, etc. Philadelphia: Collins, printer. 1874.

Much more than the usual interest of introductory lectures attaches to this discourse by Prof. Stillé. In itself it possesses extraordinary merit. Its tone, its style, its thoughts, all are elevated, sound, graceful, and scholarly. In every one of these qualities it will compare favorably with any introductory lecture delivered within the last year any where in the English language. But the circumstances under which the address was delivered invest it with a peculiar interest. It is commemorative of an important event in the history of the University of Pennsylvania, the name of which awakens pleasant associations in the mind of every American physician. The mother of American medical schools, having entered upon her second century, was taking possession of a new edifice prepared for her accommodation. Three generations of her teachers had passed away, and the great-

grandsons of those who laid the foundations of the school were speaking to the profession of what they proposed to do for its advancement.

One, as he reads the ornate discourse of Dr. Stillé, is naturally carried back in thought to the first address delivered in behalf of this school, when to most of those who heard it the idea of establishing a school of medicine on this side of the Atlantic appeared chimerical. Dr. John Morgan, addressing the trustees of the College of Philadelphia in May, 1765, says, "Perhaps this medical institution, the first of its kind in America, though small in its beginning, may receive a constant increase of strength and annually exert new vigor. It may collect a number of young persons of more than ordinary abilities, and so improve their knowledge as to spread its reputation to distant parts. By sending these abroad duly qualified it may give birth to other useful institutions of a similar nature, calculated to spread the light of knowledge through the whole American continent wherever inhabited."

The words of the address were prophetic. All that Dr. Morgan predicted concerning the embryo institution has come to pass; but he correctly described the day of which he was speaking as one of small things. The college at first had but two professorships, in which were comprehended all the branches of medicine; Morgan teaching the theory and practice of physic, and his colleague, Dr. Wm. Shippen, anatomy and surgery. Midwifery was embraced in the latter, and was taught by Shippen in a dozen lectures, which was precisely the number of students that attended his first course on anatomy. A third chair, that of materia medica and botany, was created three years later, to which Dr. Adam Kuhn was elected. In the same year Dr. Thomas Bond was appointed professor of clinical medicine, and in 1769 Dr. Benjamin Rush was elected professor of chemistry. The growth of the school was slow. During its first decade it turned out but twenty-eight graduates—"bachelors of medicine"—or less than one

fourth of the number who for a great many years past have been admitted by it annually to the degree of M. D.

Dr. Stillé thinks it would be difficult for one "acquainted with the humble lodging which sheltered its ambitious faculty to recognize in it the primal idea of the palace" they had met to inaugurate. And yet the contrast between the new edifice and the old structure is not greater than that between the museum and apparatus in the hands of the present faculty, and the slender means of illustration at the command of its first professors; and this is hardly so great as the contrast between the present method of teaching medicine and that which was pursued by Shippen and Rush. Improvement is seen every where. The century has been to the university, as it has been to the profession all over our country, one of immense progress. Medical schools, medical journals, medical books have been multiplied to an extent altogether unparalleled. But still defects exist in the system prevailing in all our medical schools, which call for correction. Dr. Stillé admits their existence in the University of Pennsylvania. The faculty, he says, are zealous for "an enlarged and elevated curriculum," and he hopes soon to see a system of instruction put in practice which is "demanded by the example of all foreign and even some American medical colleges." This he believes is demanded of the University of Pennsylvania "as the oldest medical college in the United States." He is convinced that an attempt to restrict the study of medicine "within the old-fashioned term is not only impossible but absurd."

We have never fallen in with the complaint, of which so much was heard a few years ago, about the decline of American medicine; but, on the contrary, have been ready to maintain on all occasions that the profession is steadily progressive. The lecture-term in most of our schools, if not in all, has been extended, and the curriculum materially enlarged; the lectures are very much better illustrated by apparatus and models,

and all the means of addressing the eye, and more time and consideration are given to clinical instruction; the effect of which has been to render the teaching more practical, and to produce graduates better instructed in the art as well as the science of medicine. And yet we agree with Dr. Stillé that an enlightened public opinion demands of the schools that they shall take another step forward. They have done much in the last half century, but much remains to be done. Defects exist in our system which ought to be corrected.

No one whose experience reaches back many years can have failed to remark the increasing impatience of our young men to complete their course of study. Morgan said, in his address to the trustees of the College of Philadelphia, that he had reached "the middle age of life in endeavoring to lay up treasures of useful knowledge before he commenced a settled practice." Rush was five years a student of medicine, and declared that in all that time he had never wasted a day in idleness. Two years may probably be assumed as the average duration of medical pupilage at this time, certainly it would not reach three years, and the disposition is to shorten the period still further. As now arranged, with summer as well as winter schools, a student may commence the study of medicine in autumn and become a graduate the following summer.

Now, while all will admit that the system of instruction in our schools has been vastly improved, all must see that medicine has also been greatly enlarged. No doubt under this wiser system a student may acquire a better knowledge of his profession in three years than under the old he was able to do in twice that time; but then he has more than twice as much to acquire if he would learn all that a graduate of this day ought to know. We can easily believe that a bright student, by a judicious process of "cramming," might pass a very satisfactory examination after attending one winter and one summer course of lectures in immediate succession,

and with only nine or ten months' study; but we should despair of convincing any educated physician that such a graduate would be qualified for the duties of his profession. For improved as have been the methods of teaching, no "royal road" to medical knowledge has yet been discovered, and time is still an essential element in maturing a medical education. The capacity of the human mind remains ever the same. It takes just as long now to dissect a subject or to learn the anatomy of the human body as it did in the times of Vesalius or of the Monros. A practical acquaintance with medicine, such as every graduate should have, and such as is now within the reach of every student, is not to be acquired in a few months. "It never has been and never will be that a mind hastily stuffed and overladen with knowledge will profit by it." The student must have time, not only to store his memory with the details of the science, but to make himself somewhat familiar with the art of medicine.

We are quite sure that the profession will not sanction any movement that tends to shorten the period of study by increasing the facilities for obtaining a diploma; but, on the contrary, that it is demanding a longer course and a wider curriculum in the schools. If we are not greatly mistaken, it will frown upon any plan which proposes to take a raw student in October and turn him out an M. D. the next July.

Clinical Lectures on Diseases of the Nervous System. By WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System in the University of the City of New York, etc. Reported, edited, and the histories of the cases prepared, with notes, by T. M. B. CROSS, M. D., Assistant to the Chair of Diseases of the Mind and Nervous System in the University of the City of New York, etc. *Nil desperandum.* New York: D. Appleton & Co. 1874.

In no class of maladies perhaps has medical treatment been more advanced during our period than the diseases of

the nervous system. Among them for a long time were to be found many of the *opprobria medicorum*, but it is now known that some of these are amenable to treatment; in fact that as a class we may enter upon their management with a considerable degree of assurance. Dr. Hammond adduces in this volume fresh proof of the value of therapeutics in these affections, and has invested his subject with such interest that no one who takes up these lectures will be willing to lay them down till he has finished the volume.

The volume embraces twenty lectures, and treats of partial cerebral anæmia, alternate cross hemiplegia, congestion of the spinal cord, lead paralysis, corea, aphasia, facial paralysis, cerebral hemorrhage, posterior spinal sclerosis, muscular atrophy, convulsive tremor, epilepsy, chronic basilar meningitis, cerebral congestion, facial neuralgia, sciatica, organic infantile paralysis, etc. The lectures are illustrated by cases, well reported, which impart a great additional interest to the subject. Dr. Hammond shows the immense utility of the ophthalmoscope in the diagnosis of cerebral affections. The instrument by revealing the pathological condition indicates the therapeutic agent to be employed. Speaking of epilepsy he says, "In the diurnal form I have found the bromide to act favorably, while in the nocturnal the strychnia had been productive of much more success; however I place more reliance on the condition of the cerebral circulation, as seen by the ophthalmoscope, in regard to treatment than I do on other indications." We heartily recommend these lectures to practitioners, who will find in them many admirable suggestions.

Clinic of the Month.

INFANTILE LEUCORRHŒA.—Dr. Bouchut *(Annales de Gynécologie)*, in a clinical lecture, refers to two cases of leucorrhœa occurring in children—the one a diathetic disorder, the other resulting from want of cleanliness—stating that these represent the character in many examples of this disease, while other cases are the consequence of attempted rape or of masturbation, or of syphilitic or gonorrheal infection. The most frequent causes are herpetism or the herpetic diathesis, scrofulosis, and want of cleanliness. In fact in typhoid fever, a septicæmic disease, and in virulent measles, the vulva is often covered with a muco-purulent oozing of a very irritating character; and if the children are not carefully washed, a follicular vulvitis occurs, followed by ulcerations with reddish borders and a grayish pseudo-membranous bottom, resembling aphthæ of the mouth. Soon these ulcers become phagadenic, hollowing in all directions, causing more or less destruction of the vulva, and extending even to the anus. In other cases beneath the ulcerated follicle the cellular tissue becomes engorged, forming a hard base, accompanied by swelling and redness of the labium majus; then a blackish eschar appears, and, rapidly extending, becomes true gangrene of the vulva, generally followed by the death of the patient. These varieties are the most grave and the least common. Those connected with scrofula or herpetism do not involve such serious results. After continuing some weeks or months they disappear.

The seat of leucorrhœa in children is always at the vulva, while the leucorrhœa of adults is vaginal or uterine. The liquid secreted is a more or less abundant acrid pus, irritating,

of a greenish white, and leaves green stains upon the linen. It causes an obstinate *pruritus*, compelling the infants to rub the parts frequently, and thus sometimes may induce habits of masturbation. From the vulva the fingers of the child may convey some of the pus to the eyes, and thus very violent purulent ophthalmia be produced; hence the importance of preventing such an accident.

If the leucorrhœa be caused by ascarides coming from the rectum to the vulva, use a solution of carbolic acid as a wash for the vulva and as a rectal injection, or injections of soot, and use rectal suppositories of mercurial ointment. In the leucorrhœa of acute diseases lotions of water and aromatic wine may suffice; but if there are ulcerations with a phagadenic tendency, apply an ointment made of one part of coal-tar to ten of lard, and wash morning and evening with a saponified solution of coal-tar. If in place of an ulcer there be an eschar, detach it and sprinkle the surface with camphor. When the leucorrhœa has scrofula or herpetism as its cause, give cod-liver oil and the arseniate of soda. Let the patient have a daily bath of carbonate of soda, of sulphur, or of corrosive sublimate. Lotions of corrosive sublimate, of carbolic acid, or of the saponified coal-tar, may be used, and, if the disease is obstinate, penciling the inflamed part with a solution of nitrate of silver.

The Cold Bath in Scarlet Fever.—In an exceedingly interesting paper in the London Lancet, by Dr. T. Clifford Allbutt, a writer whom we have often quoted in this journal, we find the following concerning cold bathing in scarlet-fever cases attended by hyperpyrexia:

"Armed with the thermometer, be not taken by surprise, and do not delay your remedies until your patient's state is already desperate. It is very sad to be called, as many times I have been called of late, to a patient in scarlet fever whose temperature has risen to 108° or 109° unperceived, and whose

chances of safety may have slipped away. Cool spongings, light clothing, open windows, wet screens, fatty inunctions, ice, various kinds of packs, all or any of these may let or hinder the evil which in adults is so hard to meet, not for want of knowledge, but for want of means and of intelligent and able assistants. In children, however, so easily handled, and so easily packed or bathed, it is even harder to see lives wasted, not for lack of these, but too often for lack of knowledge. These we may hope, even in later stages, to snatch from death, while in the case of adults there may not be time or opportunity for measures which, with time, are not easily undertaken.

Among the cases reported by Dr. A. is that of a delicate child. "His father was a medical man, and was in great distress about him. At my first visit his temperature was 105.3°, and rising. I hinted at the course which I should advise, but my words fell then on stony ground. A few hours later, when I called, the temperature was over 106°, still rising, and the symptoms of hyperpyrexia were very severe and alarming. I now pointed out decidedly to the father that his child would almost certainly die if we temporized further, and that if cool bathing were resorted to at once he might live. The father told me honestly that his prejudices were strongly against the procedure, but after some thought he said he would carry out whatever I wished; and, having thus promised, he carried out the plan most loyally and skillfully. I need scarcely say that my wishes were that the child should be put into a bath at 90°, which was to be cooled down to 70°, the thermometer being carefully watched the while; that when the child's temperature had fallen to 101.5° he was to be removed to a warm dry blanket, a hot-water bottle placed to his feet, and a little brandy and water administered. Struggling, screaming, and unconscious, the child was thus immersed, and on his removal the temperature, as usual, fell still further; viz., to 98°. On my return

in a few hours the little fellow was slumbering sweetly, and had slept for four hours. He had taken food consciously, and the fever temperature was 102.5°. It continued to rise, and the former symptoms began to re-appear. The father again used the bath with the same good results, and from this time recovery was rapid and uninterrupted. I need not say how great was his surprise and gladness; nor need I say how great is mine also to number him among the few who, like brands snatched from the fire, have been restored to life by one of the most brilliant discoveries of rational medicine."

The Wet Sheet in Scarlatina. — Dr. John Taylor, of Liverpool, communicates his experience in this matter to the London Lancet, and says, "My plan of procedure is to immerse a night-gown, slit up at the front, in hot water (half a pint to a pint), pure or medicated with a drachm or two drachms of tincture of capsicum, or in the infusion of three or four pods, or in mustard-water, the clear supernatant fluid from a table-spoonful of mustard to a pint of water; extending the gown over the feet by means of a towel immersed in the same fluid, both to be well wrung out and suddenly applied, and the patient quickly packed in two blankets previously placed on the adjoining sofa or bed; another blanket or two pillows, or an eider-down quilt covering all. Modern experience has witnessed the amazing relief procurable from the wet sheet, in its simple form, in pyrexial and glandular disorders, and from the medicated form in the zymotic and spasmodic affections. In stridulous croup, for instance, I have seen the mustard sheet act magically after other means more orthodox had failed. Its power is also potential in diphtheria simulating croup, and, in strong doses, in inflammatory croup, sometimes averting the impending tracheotomy knife."

At what Age should Cleft Palate be Operated on.— Mr. Francis Mason, of St. Thomas's Hospital, gives *(ibid.)*

the following answer to this question: "I have operated at various ages, and although I am far from believing that it is necessary to wait until the age of fifteen or sixteen, yet I can not but think that at the present day we are apt to go to the other extreme by operating too early in life. Every case must of course be judged on its own merits, but I venture to think the age of six or seven will, as a rule, be found to be as early as is compatible with the successful issue of the operation."

WHEN SHOULD PSOAS ABSCESS BE OPENED?—Mr. Walter Rivington, of the London Hospital, in an instructive lecture *(ibid.)* on the varieties of psoas abscess, thus answers the above question:

"In the present state of our knowledge I believe I am giving you sound advice in recommending you not to be in a hurry to touch these cases. Try change of air, tonics, and generous diet, and only interfere if the abscess is spreading inconveniently and threatening to burrow among the muscles of the lower limb, or if you think there is danger of some serious complication, such as a communication being formed with the peritoneum or the hip-joint.

"In the cases which are uncomplicated with spinal disease the abscess should be opened as soon as it is accessible in the groin. In some instances it would be justifiable to cut down upon it over the iliac fossa, proceeding, of course, with all the caution necessary to avoid the peritoneum; but in general it would be better to wait until it could be pressed below Poupart's ligament.

"How should it be opened? Almost every surgeon has had his favorite method of opening abscesses, and that method has been the outcome of his pathological creed. I am in favor of an incision sufficiently free to allow an unimpeded exit to the pus, and, as Mr. Bryant has remarked, to permit the escape of air again if any should enter the abscess cavity.

Mr. Luke had some very successful cases of large abscesses treated by much freer incisions than those generally employed. Moreover, I am in favor of such an application of the antiseptic system as shall prevent decomposition and putridity of discharges without occasioning an injurious irritation. So far as my experience has extended, I do not regard the pneumatic aspirator for opening abscesses with any degree of approval, valuable as it is in its other applications. Drainage-tubes passed from one end of an abscess to the other often prove most serviceable when we have a large cavity to deal with, and are disinclined or are unable to make free incisions. They permit a free discharge of pus, prevent bagging, stimulate the cavity to contract, and encourage the growth of granulations. I do not believe in the application of ice with the same fervor as Mr. Simon, because I do not regard the chronic secretion of pus, etc., as dependent on any elevation of temperature of the pyogenic surface which the external application of ice can subdue.

"With regard to opening psoas abscess which has entered the thigh I would offer one suggestion. We know that the neck of the abscess is situated outside the femoral artery, immediately below Poupart's ligament. To whatever extent the abscess has descended in the thigh, I would recommend that an incision should be made down to the abscess at this spot (if impulse can be felt here on pressure or coughing), so as to insure a free evacuation of the pus from the part of the abscess cavity in the abdomen, and to prevent the pus passing backward and endangering a communication with the hip-joint."

Phosphorus as a Stimulant.—Dr. John Brunton, of London *(ibid.)*, gave phosphorus to a patient under the following circumstances: "On examination I found the characteristic rose-colored spots of typhoid fever, and he had all the other symptoms present. His fever continued gradually to increase,

when he said to me, 'I am going to die;' and he looked like it. His conjunctivæ were injected, his breath cold, his skin cold and clammy; pulse 48, very weak and compressible; voice whispering; temperature 96.4°. He was in a condition of extreme depression. I at once administered phosphorus, in doses of one twelfth of a grain, every two hours, and I was surprised to find on my next visit, eighteen hours after, when he had taken three quarters of a grain of the drug, that he had quite revived. His skin was comfortably warm, eyes not so suffused, voice more natural; pulse 72; temperature 99°. I immediately stopped the phosphorus and gave nitric acid. Since then he has gone on prosperously, and is now convalescent. Heroic doses need careful watching, and I am sure the formula appended is most stable and active, and it is not unpalatable. I do not think I should care to go beyond one or at most two grains of the drug, divided over two days.

℞. Ethereal tinct. phosp. (gr. $\frac{1}{3}$ to ʒj), ʒiij;
Spt. vin. rect., ... ℥ss;
Glycerin. anhydr., ad . . . . ℥iss.
One tea-spoonful as a dose."

The Treatment of Fistulous Sinuses by the Elastic Ligature.—Mr. Allingham, of London, in a recent article on the above subject, thus sets forth, in the Medical Press and Circular, the probable advantages of this ligature over the knife in ordinary sinuses: 1. The operation is commonly painless, and the subsequent suffering, if any, is usually very slight; 2. It is bloodless; 3. There is greater rapidity of cure; 4. The patient need not keep his bed, nor even his room, but may go into the air and drive or walk in moderation; 5. Its peculiar applicability to delicate patients and those who have a phthisical tendency; 6. There is usually no anæsthetic required; 7. There is a minimum amount of suppuration; 8. And one may add that the ligature is often very advantageous as a supplement to the knife.

THORACENTESIS.—Dr. J. R. Wardell, in the British Medical Journal, thus states the conditions which may be regarded as the morbid states, and the positive and negative signs demanding the operation:

1. In all cases in which inspection and the physical signs give evidence of a large quantity of fluid, when there are symptoms of compression of the lung, and there is manifest cardiac displacement.

2. When there are urgent dyspnœa, an irregular pulse, and threatening of orthopnœa.

3. When the affected side is smooth and rounded, and the intercostal spaces are effaced or protrude; when measurement proves bulging; when the dullness in the chest is complete, or demarkated, and absolute; when there is abolition of tactile fremitus; when there are broncho-phonic voice, tubular breathing, and absence of breath-sound; when the patient can only lie on one side or in diagonal position; and when there is the hippocratic sign of succussion.

4. When the exploratory needle proves the fluid to be purulent.

5. If the heart be pushed from its normal situation, and the apex be substernal or beyond the right sternal edge, or if it be thrust toward the left hypochondrium, or if it be lost; when it becomes presumptive that the organ has been driven inward and backward; and when on the one side the liver depends abnormally into the abdomen, and when on the other side the relaxed and down-pressed diaphragm so displaces the spleen that its free edge can be *felt*.

6. When half the thoracic cavity is filled, and a month or so shows no proof of absorption, the longer the delay the less are the chances of expansion.

7. In those exceptional cases of double pleurisy when both cavities become half filled with affusion, and dyspnœa shows the lung-space to be dangerously encroached upon.

8. In pulmonary phthisis, when the accumulation of serous

or sero-purulent secretion causes distress, and when the other lung assumes the symptoms of bronchitis or pneumonia, the operation should at once be performed.

9. In mechanical hydro-thorax it may be had recourse to, though with no object to cure, but with merely a view for a time to prolong life and to aid the action of medicinal remedies.

10. In children, whose chest-walls are thin, and in whom the white tissues are more developed and confer greater resiliency to the thoracic parietes, and whenever there are certain evidences of fluid, it should without delay be evacuated.

11. In hydro-pneumothorax it may be generally with safety and benefit employed.

12. Pointing externally should never be waited for.

13. Under certain circumstances repeated tappings are required.

CYNARA IN RHEUMATISM.—As long ago as 1833 Dr. Cope man published some cases of rheumatism treated with the common artichoke in the form of tincture and extract. The result was so encouraging that he has ever since employed the tincture and extract of cynara for the cure of rheumatism with perfectly satisfactory results. He says (British Medical Journal) that in his experience no other medicine has appeared to be so efficacious in rheumatism as cynara, whether in the acute or the chronic stage. Dr. Copeman usually administers it in the following form:

℞. Potassæ bicarb., . . . ℥j;
Aquæ camph. ad., . . . ℥viij;
Tinct. cynaræ, ... ℥j;
Syrupi papaveris alb., . . ℥ss. M.

Two table-spoonfuls to be taken every four hours, with as much of the extract of cynara as would make two moderately-sized pills. Lemonade is given to quench the thirst. Should the case prove obstinate, it is perfectly safe to increase the

dose of the tincture gradually from one to four drachms. Although Dr. Copeman has found cynara, when given, to yield such good results, he says that he has frequently heard of its having failed in other hands, and he suspects the reason to be that it is often prepared from leaves gathered at an improper time, when there is no medicinal virtue in the plant. He says that the leaves ought to be gathered "just before the top of the vegetable is fit for food, and while they are full of juice. If left until the top is cut off for cooking purposes, and the plant begins to wither, no good will be derived from it, and if given it would be condemned as useless and inert.

Treatment of Malarial Hæmaturia.—Dr. Alexander, in the Atlanta Medical and Surgical Journal for January, gives a history of this endemic, and submits this as the best treatment: "Of the curative plan of treatment there seems to be a diversity of opinion. In the first cases I met with (and since then I have seen a great many) I used quinine, with muriated tincture of iron, and the revulsive treatment boldly; but frequently, after giving large doses of quinine and iron, I found the hæmaturia would seem to be worse, and I attributed it to the influence of the quinine, and consequently changed my plan to that of opiates, astringents, and arterial sedatives, with no better success. In the midst of these conflicting and unsettled plans of treatment I called in another physician to consult with me. Upon seeing cases repeatedly, and knowing that this type of fever was of a distinctly malarial character, we determined to rely upon quinine as the sheet-anchor in the treatment, and to give it in large doses, repeated until the patient was brought fully under its influence, so that the recurring chills would be prevented, and the patient thus rescued from immediate danger, because every chill lessened the patient's chances for recovery. To sum up the whole course in a few words: on first visit we find the patient very restless, with high fever, nauseated stomach, and occasionally

voiding the bladder of bloody urine; skin jaundiced; thirst almost intolerable; frequently vomiting a dark-green bile. At once I would advise a fourth grain of morphine to quiet all restlessness, and use sinapisms of mustard over the stomach and bowels, with a hot-mustard foot-bath. After quiet was restored and reaction fully established, I would put the patient upon quinine and iron in sufficiently large doses to bring him at once under its influence; for in my opinion, based upon a large experience, unless the patient is speedily relieved of these persistent chills, his chances to recover will scarcely be one in seventy-five."

Influence of Mercury on the Richness of the Blood in Red and White Corpuscles.—M. Malassez has invented an ingenious instrument for counting with precision the number of white and red globules in a given quantity of blood. From some researches made with it by Dr. Wilbouchewitch, of Moscow *(Archiv. de Physiologie)*, the following conclusions have been reached in regard to the action of mercury on the blood:

1. Before treatment the number of globules progressively diminishes and descends below the average. Syphilis is apparently a cause of hypo-globulie.

2. During treatment the number of globules increases and becomes normal. It is difficult not to see in the constancy of this fact the influence of the mercurial treatment, and not to conclude from it that mercury arrests and cures syphilitic hypo-globulie.

3. The treatment being continued, the globules diminish in number. Mercury given in too large doses, or during too long a time, causes anæmia; destroys the good it had done.

Mercury as a Cholagogue.—In Dr. Murchison's lecture on the functional derangements of the liver (London Lancet) he expresses his belief that mercury and allied purgatives

produce bilious stools by irritating the upper part of the bowel, and sweeping on the bile before it has time to be absorbed. He adds that there are grounds for belief that mercury acts beneficially in many functional derangements of the liver. The good effects of mercury on the liver, and in some forms of inflammation, may be due to its property of promoting disintegration. Mercury apparently has the power of rendering effused lymph less cohesive, and so facilitates its removal by absorption. It is not improbable that mercury may under certain circumstances promote or influence the disintegration of albumen. Dr. Murchison considers that the clinical proofs of the efficacy of mercury in certain derangements of the liver are overwhelming.

THE LOCAL TREATMENT OF GRANULAR DISEASE OF THE CONJUNCTIVA.—[We have been very much interested in reading a communication in the January number of the British and Foreign Medico-Chirurgical Journal, by Mr. Ed. Nettleship, surgeon to the South-London Ophthalmic Hospital, on *Granular Disease of the Conjunctiva and Contagious Ophthalmia.* Especially have we been interested in the treatment of the former affection as advised by Mr. Nettleship, for it is essentially the treatment we learned about twenty-three years ago at Will's Hospital, Philadelphia, under those professional veterans still living, Drs. Hays, Littell, Fox, and Neill.—T. P.]

It does not seem likely that any thing will be found equal to nitrate of silver and sulphate of copper as local applications. When properly used they give results which, taking the nature of the disease into consideration, leave little to be desired. For general purposes there is nothing equal to a solution of nitrate of silver of ten grains to the ounce of water, in which strength it is chiefly or wholly astringent. This solution applied daily with a moderately large camel's-hair brush cuts short most inflammatory attacks with great certainty, and very much reduces the roughness and redness

of the lids in the chronic granular condition, unless this be of very old-standing. When the case is one of old thick granular lids, the mitigated solid nitrate often has more and better effect. At first wash off the lid five or ten seconds after thus applying the nitrate in substance with a solution of chloride of sodium (five grains to the ounce), or of chloride of zinc (two grains to the ounce), either by means of a syringe or of a large flat brush; but it will be found, after a few weeks, that in many cases the application thus made has little effect, and it will be necessary either to wait from fifteen to thirty seconds or more after applying the caustic before washing it away, or to omit washing it off altogether. The mitigated caustic should at first never be used oftener than three times a week, though some old cases will be found in which its daily application is necessary. The ten-grain solution must be used daily or three times a week, according to the effect it is found to produce. Solutions of more than twenty grains are unsafe, unless they are washed off, and when this is done they have no advantages over the solid form, and are indeed less easy to localize than the latter.

A certain number of patients do not improve under the use of silver in any form, nor even when used at long intervals; a few others are made decidedly worse by it, the congestion being permanently increased, the granulations growing rapidly and bleeding on the slightest touch. Most of these cases derive much benefit from solid diluted sulphate of copper, *lapis divinus*, applied two or three times a week or oftener, according to experience. Such as do not improve under either silver or copper will not, so far as I have seen, do so with preparations of either lead or tannin, or tannate of lead. I prefer the solutions of silver as standard applications, reserving the *lapis divinus* for those who get worse or who do not improve under the former. Those who are made worse by one will generally be benefited in a marked degree by the other. After the applications of preparations of silver or

copper cold fomentations should be used if there is much pain. They greatly relieve the present pain and the risk, which is generally greatest, I think, when the pain is most severe, of too great inflammatory action setting in.

Use of Quinine in the Treatment of Infantile Diseases.—In a paper in the *Deutsche Klinik*, 1874, Dr. Rapmund contends that quinine and cold affusions are the most energetic and most certain antipyretics. He gave quinine in four cases of scarlet fever, eleven cases of measles, two cases of small-pox, three cases of erysipelas, nine cases of lobular pneumonia, and three of follicular enteritis. When a sufficient dose had been administered the temperature and frequency of the pulse fell, and a calm, prolonged sleep ensued. Quinine has great power in rendering the course of febrile diseases benign. In the treatment of erratic erysipelas by quinine Rapmund has been as successful as Vogel. In the treatment of lobular pneumonia of infants by quinine the author obtained seven cures out of nine cases. It is in the stage when the febrile symptoms are acute, and the temperature and pulse-rate higher than normal, that quinine is indicated. In hooping-cough quinine diminishes the violence of the attack and promotes rest at night. It also appears to prevent complication, and to render the course of the disease benign.

Spasm or Tenesmus of the Muscular Portion of the Urethra and Neck of the Bladder cured by Cystotomy. M. Parona had a patient, twenty-two years of age, who contracted gonorrhea at fifteen; now had no discharge, but had vesical irritation, painful contractions at neck of the bladder during micturition; irregular, jerky stream; urine normal and without parasites; catheterism easy in the greater part of the urethra, but possible only at the region of the neck when the resistance was tired out; bladder healthy. Antispasmodics

were first tried; bromide of potassium, chloral, morphia, and belladonna rubbed into the perinæum, but with no benefit; forced dilatation of the neck of the bladder was equally unavailing. Cystotomy was then performed, and in a month the patient was well and free from his former sufferings. M. Parona presents the following conclusions: 1. Palliative means, which one should always try, are in a great number of cases absolutely inefficacious; 2. The surest treatment is incision of the neck of the bladder; 3. Cystotomy should be preferred to intra-urethral section. (British and Foreign Medico-Chirurgical Journal.)

Neuralgias of the Mammæ and Indurations of the Mammary Gland.—Dr. M. Rosenthal *(Wien. Med. Presse)* states that hyperæsthesia of the breast occurs in various conditions, especially in the hysterical. Moral excitement, uterine affections, menstrual suppression, the advent of menstruation, pregnancy, constriction of the thorax, are the most frequent causes of this neuralgia, which may assume a certain intensity, appearing and disappearing with the cause which has produced it. It has also been observed alike in cancer of the breast, of the liver, and of the stomach, and in simple hypertrophy of the breast. The severest form of this affection, *mastodynia*, may be compared to neuralgia of the testicle. Nevertheless, according to Rosenthal, this neuralgia does not depend directly upon the nerves of the fourth cervical pair—superclavicular nerves—but in an indirect manner upon the intercostal nerves; and these are his reasons: mastodynia is often accompanied with neuralgias of the arm, of the internal wall of the axillary cavity, and of the shoulder, parts to which the pectoral cutaneous nerves are distributed. In one case he noticed neuralgia of the abdominal wall.

The first case cited by Rosenthal was of a married woman, twenty-five years old, in whom the mastodynia was accompanied with neuralgic pains on the inner side of the arm, and

extending to the tips of the fingers. After two years of treatment the disease yielded decidedly to injections of morphia, ferruginous diet, and sea-bathing. The second patient was unmarried, twenty-eight years of age, chloro-anæmic, and previously tormented with hemicrania and gastralgia. She suffered for fifteen months with neuralgia in each breast, with nodosities in them; often also the abdominal walls were painful. The breasts are normal in appearance, temperature remarkably low, and are very sensitive to touch. The nodosities are quite distinct, and vary in size from a hazel-nut to a chestnut. The skin is sensitive upon all the thorax, and especially around the gland. To the right of the epigastric depression there is a small nodosity, the size of a lentil, very painful to the touch. The pains were somewhat calmed by pills of aloes and asafetida administered for four weeks; then half-baths with douches, and finally general baths were directed. The smaller nodosities have disappeared, while the others have diminished in volume and in consistence.

The third patient was a boy of sixteen years, born of a very nervous mother. He had aching and twinging pains in the right breast, with cutaneous hyperæsthesia of the thorax, and hyperæsthesia of the spinous processes of the first dorsal vertebra. In this case the cause was onanism. The pains were calmed by quinia and lupuline, and a cure was effected by three months' residence in the country, where the patient took cold hip-baths with lotions upon the back.

The benign nodosities of the breast may be mistaken for cancerous growths; but the error will be prevented by considering the age of the patient, the slowness of development of the tumor, and the general condition of the subject. The commencement, the progress, the mobility, etc., will not permit confounding them with sarcomatous, fibrous, lipomatous, or hydatid tumors, nor with fibrous indurations and deep abscesses. *(Archives Générales.)*

Notes and Queries.

American Medical Association.—The next meeting of our great medical congress, as is known to our readers, will take place in this city on the first Tuesday in May; and from the indications reaching us we are confident that the meeting will not only be large, but will embrace an unusual proportion of the leading physicians of our country. The Boston Medical and Surgical Journal is urging the societies of Massachusetts to send their best men to the meeting "to make one last determined effort to aid in a commendable reform." There is an evident revival of interest in the association in every section of our country, which gives promise of the best results. We are not sure that we understand the language of our Boston contemporary about "a commendable reform," but we hail with great pleasure any evidence of a disposition on the part of the medical public to sustain our national association, assured that through it the happiest results may be expected. The association is what it is made by the profession. If the ablest men attend its meetings, they will make it worthy of the American profession. It will not be made so by staying at home and disparaging it.

"Reform" has been the watchword of a large party in the association ever since it was organized, and our respected contemporary returns to it. We do not like the term. Improvement, progress, is the word we should apply to the case. The profession wants development, growth, cultivation, advancement, not reform; and the association is set to aid and direct it in its course. We are of those who have from the beginning entertained high hopes of the association, and we are ready to affirm that it has exercised a most beneficent

influence upon the profession of our country. If it has not accomplished all that might justly have been expected of it, it is because so many, who might have enhanced the interest of its meetings and its transactions by their attendance and co-operation, have preferred to stay at home and look after their own individual interests. We expect to see in Louisville, in May next, an assemblage of professional talent which shall do full justice to its high aims.

DR. W. W. YANDELL.—The death of this estimable gentleman, who was for more than twenty-five years a leading physician of Gibson County, Tennessee, is announced in late papers from Jackson and Humboldt. Dr. Yandell was a native of Rutherford County, Tenn., where he was born, August 11, 1821. In 1846 he left his home, on Stone's River near Murfreesboro, and came to Louisville to study medicine. After two years of diligent study he was admitted to the degree of M. D., in the University of Louisville, in the spring of 1848. He was a man of a sound judgment, and became a most judicious practitioner. His moral qualities were of a character to secure him the respect and confidence of all who knew him. His valuable life was terminated by an attack of erysipelas, when he was at the height of his usefulness, and had still the promise of many years of professional activity. He died at his residence, in Milan, on the 31st of January. In an obituary notice of him his friend and neighbor, Dr. Wm. H. Stilwell, says, "Dr. Yandell's death will be mourned by the whole community, for all were his friends. Though undemonstrative and retiring in manner, his large and sensitive heart responded tenderly to every call of friendship or humanity. The writer of this knew him intimately for more than twenty-five years, and can truly say no man had more ardent friends, or possessed in a higher degree the happy faculty of attaching them to him. As a citizen, a husband, and a father, no one better exemplified the virtues of those

relations; and as a physician, not only the public but his professional brethren will unite in the plaudit, 'Well done, faithful servant of science and of humanity.'"

KENTUCKY STATE MEDICAL SOCIETY.—The next meeting of this society will be held in Henderson, commencing the first Tuesday in April. Whenever the society meets in the southern part of the state the attendance is sure to be good, and a spirited meeting may be looked for at Henderson. Ample provision has been made for literary entertainment, committees having been appointed to make reports enough to occupy the members a week, if all are prepared and read. The fact that many of its members will wish to be appointed delegates to the American Medical Association, to meet in this city the month following, will secure a large meeting.

PRIZE ESSAYS.—Dr. J. D. Jackson, chairman of the committee of the American Medical Association on prize essays, is seeking health this winter in the genial climate of Florida, and fears that he will not be able to return in time to attend to these duties. He has therefore directed that papers written for the inspection of the committee be forwarded to Dr. L. P. Yandell, at Louisville.

TREATMENT OF ERYSIPELAS.—As a good deal is being said just at this time of the manner in which erysipelas should be treated, it may not be out of place to give the rival modes of treating this disease which prevailed in the University College Hospital thirty years back: "When erysipelas was almost epidemic in the hospital, both amongst the medical and surgical patients, we had four practitioners of the highest eminence and skill treating the disease in four different and distinct ways! Elliotson was painting the patient with a strong solution of nitrate of silver; Thomson was smearing the surface over with mercurial ointment; Cooper, with his usual caution, modified the topical treatment by attempting

to isolate the disease by drawing lines of lunar caustic around the margins of the efflorescence to prevent it spreading beyond them; while Liston confined himself to the older mode of treating the disease locally by means of fomentations and the application of flour. But, notwithstanding his assumed contempt for medicine, he always administered powerful remedies internally. Belladonna at this time was much resorted to by the homœopathists, and this Liston employed, together with antimony, in what were regarded 'heroic' doses. Liston at this period was very frequently called into consultation by Dr. Quin, then the head of the 'heresy,' and was no doubt considerably influenced by the sagacity of that able and philosophical but mistaken practitioner. It was curious to listen to the clinical lectures of the four principal medical officers of the hospital, sometimes delivered the same week. Elliotson, always clear, decisive, and 'rational,' gave reasons for all he did, and justified his treatment with the nitrate of silver, and appealed to the results of that treatment. He would occasionally make a sly, good-humored allusion to the 'do-nothing' mode of treatment, but he was never coarse or ill-natured in his remarks on the practice of his colleagues. Thomson would drily, and with the most perfect coolness—as if indeed he and his colleagues had agreed to try a series of experiments on the treatment of the disease—draw conclusions from all the cases, and would analyze in his labored manner the results of the therapeutical agents employed. Cooper stuck mainly to his own cases, and if he did allude in any way to those of his colleagues, it was in a quaint, humorous style, without being offensive. He could, however, when he pleased say very nasty things in a very quiet way. Liston's impetuous temperament urged him to say very uncivil and very bitter things. He ridiculed the idea of curing erysipelas by 'turning a white man into a nigger,' or by 'drawing lines horizontally, perpendicularly, and slantingdicularly over a patient's body.'"
(Autobiographical Recollections of the Medical Profession.)